



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
PO Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,707	07/20/2000	Masaharu Ogawa	Q58688	3363

7590

05/22/2003

Sughrue Mion Zinn MacPeak & Seas PLLC  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3202

EXAMINER

KAO, CHIH CHENG G

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/620,707

Applicant(s)

OGAWA, MASAHARU

Examiner

Chih-Cheng Glen Kao

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 6/13/02 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of Ogawa (U.S. Patent No. 6455867) in view of Imai (EP 0898421).
2. With regards to claim 1, Ogawa discloses a radiation detector comprising, a first electrode layer, a recording photoconductive layer, a reading photoconductive layer, a second electrode layer comprising a plurality of main and secondary line electrodes alternately arranged in parallel, said secondary line electrodes outputting an electrical signal which has a level proportional to a quantity of latent image change stored in a charge storage portion formed between the recording and reading photoconductive layers, wherein a transmission factor  $P_c$  and  $P_b$  of the main and secondary line electrodes are different values (Claim 1), a width  $W_b$  and  $W_c$

Art Unit: 2882

of the main and secondary line electrodes and the transmission factors satisfy a condition equation of  $(W_b \times P_b) / (W_c \times P_c) \geq 1$  (Claim 6).

However, Ogawa does not specifically disclose solid state.

Imai discloses a solid state (Fig. 13A).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made to have the solid state detector of Imai with the claims of Ogawa, since it would be within general skill of a worker in the art to select a known material on the basis of its suitability for the indeed use as a matter of obvious design choice. One would be motivated to use solid state to be able to move the charges related to the images as implied from Imai (col. 17, lines 39-59).

3. With regards to claim 2, Ogawa further discloses the width and transmission factors of the main and secondary line electrodes satisfying  $(W_b \times P_b) / (W_c \times P_c) \geq 5$  (Claim 6).

4. Claims 3-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of Ogawa (U.S. Patent No. 6455867) in view of Imai as applied to claims 1 and 2 above, and further in view of Nelson et al. (US Patent 5,508,507).

5. With regards to claims 3 and 4, Ogawa in view of Imai suggests a device as recited above.

Art Unit: 2882

However, Ogawa does not seem to specifically disclose main line electrodes made of any one among a list of compounds including aluminum.

Nelson et al. teaches electrodes made of aluminum (col. 14, lines 48-49).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the aluminum electrodes of Nelson et al. with the suggested device of Ogawa in view Imai, since one it would have been within the general skill of a worker in the art to select a known material on the basis of its suitability for its intended use as shown by Nelson et al, wherein that use is electrical conductivity which is characteristic of aluminum and its semi-transparent characteristics (col. 9, lines 7-8) for allowing light to travel through as shown in Figure 1.

6. With regards to claims 5-7, Ogawa in view of Imai suggests a device as recited above.

However, Ogawa does not seem to specifically disclose secondary line electrodes made of any one among a list of compounds including aluminum.

Nelson et al. teaches electrodes made of aluminum (col. 14, lines 48-49).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the aluminum electrodes of Nelson et al. with the suggested device of Ogawa in view Imai, since one it would have been within the general skill of a worker in the art to select a known material on the basis of its suitability for its intended use as shown by Nelson et al, wherein that use is electrical conductivity which is characteristic of aluminum and its semi-transparent characteristics (col. 9, lines 7-8) for allowing light to travel through as shown in Figure 1.

7. Claims 8-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of Ogawa (U.S. Patent No. 6455867) in view of Imai as applied to claim 1 above, and further in view of Luke (US Patent 6218668)

8. With regards to claim 8, Ogawa in view of Imai suggests a device as recited above. However, Ogawa does not seem to specifically disclose different width electrodes. Luke further teaches different width electrodes (Fig. 8A and 8B).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the different width electrodes of Luke with the suggested device of Ogawa in view of Imai, since one would be motivated to adjust the charge induction characteristics to suit the particular detector material parameters and bias conditions as shown by Luke (col. 6, lines 49-65).

9. With regards to claim 9, Ogawa in view of Imai suggests a device as recited above. However, Ogawa does not seem to specifically disclose the main widths less than the secondary widths.

Luke further teaches the main widths less than the secondary widths (Fig. 8A)

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the main width is less of Luke with the suggested device of Ogawa in view of Imai, since one would be motivated to adjust the charge induction characteristics to

Art Unit: 2882

suit the particular detector material parameters and bias conditions as shown by Luke (col. 6, lines 49-65).

10. With regards to claim 10, Ogawa in view of Imai suggests a device as recited above.

However, Ogawa does not seem to specifically disclose different width electrodes, the main widths less than the secondary widths or the secondary widths less than the main widths.

Luke further teaches the secondary widths less than the main widths (Fig. 8C).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the secondary width is less of Luke with the suggested device of Ogawa in view of Imai, since one would be motivated to adjust the charge induction characteristics to suit the particular detector material parameters and bias conditions as shown by Luke (col. 6, lines 49-65).

#### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glen Kao whose telephone number is (703) 605-5298. The examiner can normally be reached on M - Th (8 am to 5 pm).

Art Unit: 2882

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



gk  
May 14, 2003

